

WHAT IS CLAIMED IS:

1. An in-plane switching mode liquid crystal display device comprising:

5 first and second substrates;

common electrodes arranged on one of the first and second substrates in a substantially zigzag pattern wherein each common electrode has at least one bent portion;

10 pixel electrodes arranged with a substantially zigzag pattern corresponding to the common electrodes roughly in parallel with the common electrodes;

common electrode frames extending from the bent portion of at least one of the common electrodes; and

15 a liquid crystal between the first and second substrates.

2. The device of claim 1, further comprising:

pixel electrode frames extending from a bent portion of at least one of the pixel electrodes.

20 3. The device of claim 2, wherein respective common electrode frames are located between two neighboring pixel electrode frames.

25 4. The device of claim 2, wherein respective pixel electrode frames are located between neighboring common electrode frames.

30 5. The device of claim 2, wherein respective common electrode frames and the pixel electrode frames are arranged in parallel with one another.

6. The device of claim 5, wherein the pixel electrode frames and the common electrode frames are alternately arranged in one direction.

7. The device of claim 1, wherein the common electrode frames are essentially located in the bent portion having a smaller angle than 180° .

5

8. The device of claim 2, wherein the pixel electrode frames are essentially located in the bent portion having an angle smaller than 180° .

10 9. An in-plane switching mode liquid crystal display device comprising:

first and second substrates;

common electrodes arranged on one of the first and second substrates in a substantially zigzag pattern wherein each pixel electrode has at least one bent portion;

15 pixel electrodes arranged with a substantially zigzag pattern corresponding to the common electrodes roughly in parallel with the common electrodes wherein each pixel electrode has at least one bent portion;

20 a dielectric frame partially overlapping the bent portion of the pixel electrodes and extending from the bent portion; and

a liquid crystal between the first and second substrates.

25 10. The device of claim 9, wherein the dielectric frame is formed inside the bent portion.

11. The device of claim 9, wherein the dielectric frame has a gradually decreasing width toward the common electrodes.

30

12. The device of claim 9, wherein the dielectric frame includes a dielectric material having a dielectric anisotropy smaller than that of the liquid crystal.

13. The device of claim 9, wherein the dielectric frame has a thickness smaller than a distance between the first and second substrates.

5 14. The device of claim 9, wherein the dielectric frame has a thickness substantially equal to a distance between the first and second substrates.

10 15. An in-plane switching mode liquid crystal display device comprising:

first and second substrates;

common electrodes arranged on one of the first and second substrates in a substantially zigzag pattern wherein each common electrode has at least one bent portion;

15 a pixel electrode arranged with a substantially zigzag pattern corresponding to the common electrodes roughly in parallel with the common electrodes;

20 a dielectric frame partially overlapping the bent portion of the common electrodes and extending from the bent portion; and

a liquid crystal between the first and second substrates.

25 16. The device of claim 15, wherein the dielectric frame is formed outside the bent portion of the common electrodes.

17. The device of claim 15, wherein the dielectric frame has a gradually decreasing width toward the pixel electrodes.

30 18. The device of claim 15, wherein the dielectric frame includes a dielectric material having a dielectric anisotropy greater than that of the liquid crystal.

19. The device of claim 15, wherein the dielectric frame has a thickness smaller than a distance between the first and second substrates.

5 20. The in-plane switching mode LCD device of claim 15, wherein the dielectric frame has a thickness substantially equal to a distance between the first and second substrates.

09938563-082701